

# Henkel Solutions for Autonomous Driving



## BERGQUIST LIQUI FORM TLF 4500CGEL-SF

4.5 W/mK, 1-component, cure-in-place liquid thermal interface material based on silicone-free chemistry

### KEY PERFORMANCE FEATURES

- » **Innovative 1-component solution that cures-in-place** for enhanced vertical gap stability\*
- » **Excellent handling properties & very fast dispensing speed\***
- » **Silicone free technology** passing hazing and fogging tests – optimized for optical systems
- » **High thermal conductivity**, temperature reliability & low assembly stress rheology

\*Versus conventional: 1-component pre-cured materials

Leverage Henkel's broad technology portfolio and application know-how to strengthen your ADAS & electronics applications.





## BERGQUIST LIQUI FORM TLF 4500CGEL-SF

### KEY BENEFITS

- » Low assembly stress **eliminating component damage & failure during assembly**
- » Excellent vertical gap stability for **long-term reliability & performance**
- » Exhibits **no cracking/low voiding** in cure condition
- » Low dispensing viscosity & high thixotropy
- » Ease of dispensing with high shot consistency for **high throughput manufacturing**
- » **Excellent wet-out** for lower thermal impedance

### PRODUCT CHARACTERISTICS

TECHNOLOGY	Silicone Free
THERMAL CONDUCTIVITY ASTM D5470, (W/m-K)	4.5
FLOW RATE (EFD 30cc, 90psi)	45 g/min
CURE	Moisture Cure*
VERTICAL GAP STABILITY	Up to 3mm
STORAGE	Room temperature

\* Material is dry to touch within 24 hours at RT  
(but could be accelerated with heat if needed)

### TYPICAL APPLICATIONS

- » Automotive cameras, radars/LiDARs, data modules and displays
- » Applications in automotive and industrial electronics requiring fast processing & high reliability

### CONFIGURATIONS AVAILABLE

- » 30cc, 50cc, 150cc and 600cc cartridge sizes
- » 25kg supplied in 5 gallon pail

Reach out to our experts to partner up for thermal applications in automotive and industrial electronics.

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